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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,736	09/24/2001	Hirokazu Yamada	2635-29	4240

23117 7590 07/17/2003

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 07/17/2003

78

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,736

Applicant(s)

YAMADA ET AL.

Examiner

Donghai D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 7-12, 19-23 and 27-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-18, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, Species A (Claims 1-6, 13-18, and 24-26) in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

3. The abstract of the disclosure is objected to because the claimed invention is a method. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: the numerical number "19" in page 14, lines 20, 24, and 25 should be --10--. The phrase "A gas sensor" line 1 of claims 2-6, 14-18, and 25-26 should be --The gas sensor--.

Appropriate correction is required.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

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The following title is suggested: "METHOD OF MANUFACTURING A GAS SENSOR".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 13-18 and 24-26 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4556,475 to Bayha et al. in view of US Patent No. 4,730,389 to Baudino et al.

Regarding claims 1, 13, and 24, Bayha et al. disclose a gas sensor (10) manufacturing method comprising the steps of: preparing an assembly which has a length and includes a housing (casing 11) which has a length made up of a first end portion, a second end portion, and a flange (12) between the first and second end portions, a cover (shell 17 and cap sleeve 74) which is made up of a small-diameter portion, a large-diameter portion, and a shoulder (area at end face 72) formed between the small-diameter portion and the large-diameter portion (Fig. 1), a first insulation porcelain (41) disposed in the large-diameter portion of the cover in contact with the shoulder through an elastic member (45), a second insulation porcelain (40) disposed in the housing in contact of an end thereof with an end of the first insulation porcelain in alignment with each other, and a laminated sensor element (30/35) disposed in the second insulation porcelain; pressing the cover against the housing in a lengthwise direction of said assembly to fit an end of the large-diameter portion of the cover on the first end portion of the housing to form an overlap (Col. 3, lines 50-60); tacking the large-diameter portion of the cover to the first end

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portion of the housing at the overlap while pressing the cover against the housing (col. 2, lines 21-24 and inherence). Bayha et al. do not rotate the assembly and weld the large-diameter portion of the cover to the first end portion of the housing at the overlap while pressing the cover against the housing. However, Baudino et al teach the step rotating the assembly and welding the cover to the housing (figs. 5-6 and col. 4, lines 24-27) for providing a hermetic sealing and preventing any corrosion (Col. 4, lines 30-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bayha et al. to having the steps of rotating the assembly and welding the cover to the housing as taught by Baudino et al for providing a hermetic sealing and preventing any corrosion.

Regarding claims 2, 14, and 24 see col. 3, lines 48-54.

Regarding claims 4-6 and 15-18 also met as set for above.

Allowable Subject Matter

8. Claim 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

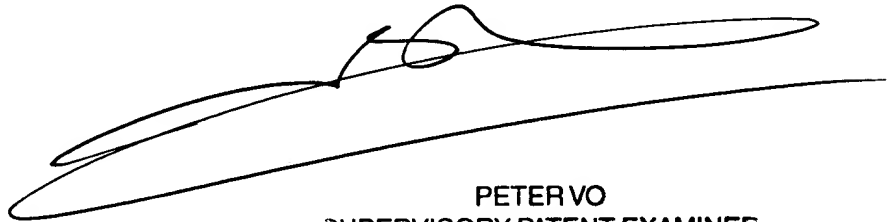
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (703) 305-7859. The examiner can normally be reached on Monday-Friday (9:00-6:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

DN
July 8, 2003

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke, positioned above the printed name and title.

PETER VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700